

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claim 1-6, 9-19, 21, 22 and 24 are pending in the present application. Claims 1, 16 and 24 have been amended and claim 23 has been canceled by the present Amendment.

In the outstanding Office Action, claims 1, 4, 11 and 16 were rejected under 35 U.S.C § 112, first paragraph; claims 1, 2, 4, 5, 9, 11, 12, 14, 16-19 and 22 are rejected under 35 U.S.C § 103(a) as unpatentable over Kim et al. in view of Hagting et al.; and claims 3, 6, 10, 13, 15, 21, 23 and 24 were rejected under 35 U.S.C § 103(a) as unpatentable over Kim et al. in view of Hagting et al.

Regarding the rejection of claims 1, 4, 11 and 16 under 35 U.S.C § 112, first paragraph, the Office Action indicates the limitation "...a second time duration that is shorter than the first time duration..." was not described in the Specification. However, it is respectfully noted that original dependent claim 3 recites that the first time duration is the same as greater than the sum of the second time duration and the retransmission time period. Thus, it is clear that the second time duration is shorter than the first time duration. Figure 4 also clearly illustrates this feature. For example, Figure 4 illustrates driving a first timer and then driving a second timer. As shown in Figure 4 the second timer expires before the first timer. Thus, Figure 4 also illustrates that the second time duration is shorter than the first time duration. Accordingly, in light of the above comments, it is respectfully request this rejection be withdrawn.

Claims 1, 2, 4, 5, 9, 11, 12, 14, 16-19 and 22 stand rejected under 35 U.S.C § 103(as) as unpatentable over Kim et al. in view of Hagting et al. This rejection is respectfully traversed.

Independent claim 4 is directed to a handover processing method for a mobile communication system. The method includes starting a handover procedure, requesting a radio link set to a radio network controller (RNC) when the handover procedure starts, performing a backup of a present radio link set and changing the present radio link set when the radio link set

request is approved, operating a first timer for counting a first period of time after the changing step, transmitting a radio link set completion message to the RNC and waiting for a reply signal in response to the radio link set completion message, operating a second timer to count a second period of time that is shorter than the first period of time, retransmitting the radio link set completion message when the reply signal is not received in the second period of time, reverting the changed radio link set back to the previous backed-up radio link set when the reply signal is not received and the first period of time has expired, and finishing the handover procedure. Independent claims 1, 11, and 16 include similar features in a varying scope.

For example, with reference to Figure 4, the method first determines whether the second timer has expired (S15), and if the second timer has expired (yes in S15), the active set update complete message is retransmitted. If the second timer has not expired (no in S15), the method continues to wait to determine if an RLC_ACK has been received. Further, after the second timer has expired, the method also determines whether the first timer has expired (S18). If the first timer has expired in addition to the second timer (yes in S18), the changed radio link is reverted back to the previous backed-up radio link set (yes in S19). Thus, the present invention uses a combination of first and second timers to determine if the RCL_ACK is received from the RNC and to determine whether or not to revert back to a previous backed-up radio link set.

Regarding the first and second timers, the Office Action indicates that Kim et al. teaches a first counter for counting a first period of time and cites page 3, paragraph [027] and a second timer for counting a second period of time that is shorter than the first period of time and cites paragraphs [012] and [075]. However, it is respectfully noted the alleged first and second timers in Kim et al. are not related to each other. For example, the alleged first timer for counting the first period of time refers to an action time that the node B is to transmit the user data to the UE (see paragraph [022]). This timer is not related to reverting the changed radio link set back the previous backup-radio link set when the reply signal is not received and the first period of time has expired as claimed by the present invention.

Further, regarding the alleged second timer in Kim et al., the paragraph [0012] only refers to the RLC ARQ processing between the UE 130 and RNC 121 (see Figure 2) being longer than the HARQ processing between the UE 130 and node B 123. Note that these time

durations do not correspond at all to the alleged first time duration. Paragraph [0075] also only refers to transmitting SNs of a defective RLC to the transmitter based on a predetermined condition which can be a time period set by a timer. The timer in paragraph in [0075] is not at all related to the alleged first timer. Thus, Kim et al. does not teach or suggest using a combination of timers to advantageously revert back to the previous backed-up radio link as in present invention. Hagting et al., also does not teach or suggest these features.

Accordingly, it respectfully submitted independent Claims 1, 4, 11 and 16 and the claims dependent therefrom are allowable.

Further, it respectfully submitted the rejections of Claims 3, 6, 10, 13, 15, 21, 23 and 24 under 35 U.S.C § 103(a) noted in item 6 of the Office Action has also been overcome as these claims are dependent claims and Zeira et al. also does not teach or suggest the features recited in the correspondent independent claims.

Conclusion


Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact David A. Bilodeau. (Reg. No. 42,325) at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Dated: December 19, 2006

Respectfully Submitted,

By 

Esther H. Chong
Registration NO.:40,953
BIRCH, STEWART, KOLASCH & BIRCH, LLP
8110 Gatehouse Road
Suite 100 East
P.O. Box 747
Falls Church, Virginia 22040-0747
(703)-205-8000
Attorney For Applicants